

Comparisons of Job Characteristics

Focus Occupation: [Bus and Truck Mechanics and Diesel Engine Specialists \(49-3031\)](#)
Associated Occupation: [Mobile Heavy Equipment Mechanics, Except Engines \(49-3042\)](#)

[Compare Knowledge](#)
[Compare Skills](#)
[Compare Abilities](#)
[Compare Detailed Work Activities](#)
[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: [Bus and Truck Mechanics and Diesel Engine Specialists \(49-3031\)](#)
Associated Occupation: [Mobile Heavy Equipment Mechanics, Except Engines \(49-3042\)](#)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	23.6	21.1	<	Expanded education and/or training may be required
Engineering and Technology	5.7	10.2	6.1	<<	Extensive education and/or training may be required
Physics	4.3	7.9	5.9	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: [Bus and Truck Mechanics and Diesel Engine Specialists \(49-3031\)](#)
Associated Occupation: [Mobile Heavy Equipment Mechanics, Except Engines \(49-3042\)](#)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Troubleshooting	4.5	13.6	11.0	<	A higher skill level may be required
Repairing	3.4	13.2	11.2	<	A higher skill level may be required
Equipment Maintenance	3.5	12.9	10.2	<	A higher skill level may be required
Operation Monitoring	6.6	11.9	10.0	<	A higher skill level may be required
Quality Control Analysis	5.9	11.9	9.4	<	A higher skill level may be required
Operation and Control	5.4	10.8	9.7	<	A higher skill level may be required
Equipment Selection	3.3	9.3	7.5	<	A higher skill level may be required
Management of Material Resources	3.7	6.4	1.3	<<	Extensive development of skills in this area may be required
Installation	1.7	6.0	2.2	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 93			
Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031) Associated Occupation: Mobile Heavy Equipment Mechanics, Except Engines (49-3042)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Control Precision	6.6	13.9	12.3	<	Some improvement in abilities may be required
Multilimb Coordination	6.0	13.5	11.9	<	Some improvement in abilities may be required
Extent Flexibility	4.8	13.4	10.3	<<	Extensive improvement in abilities may be required
Manual Dexterity	6.5	13.0	11.9	0	Current ability level may be sufficient
Finger Dexterity	7.6	12.9	11.8	0	Current ability level may be sufficient
Visualization	7.5	12.2	9.5	<<	Extensive improvement in abilities may be required
Reaction Time	4.8	11.4	8.8	<<	Extensive improvement in abilities may be required
Hearing Sensitivity	5.6	11.0	11.4	0	Current ability level may be sufficient
Response Orientation	4.0	9.4	8.4	<	Some improvement in abilities may be required
Sound Localization	2.2	5.8	5.9	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 96
Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031) Associated Occupation: Mobile Heavy Equipment Mechanics, Except Engines (49-3042)		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Adjust or set mechanical controls or components	69	
Align or adjust clearances of vehicle body parts or components	78	
Align vehicle frame	87	
Assemble, dismantle, or reassemble equipment or machinery	70	
Conduct tests to locate mechanical system malfunction	71	
Determine installation, service, or repair needed	58	
Diagnose malfunctioning vehicle systems	85	
Diagnose mechanical problems in machinery or equipment	65	
Examine vehicle to detect malfunctions, damage, or maintenance needed	75	
Fabricate, assemble, or disassemble manufactured products by hand	11	

Follow safe waste disposal procedures	50
Follow vehicle repair procedures	85
Identify base metals for welding	68
Inspect machinery or equipment to determine adjustments or repairs needed	42
Lubricate machinery, equipment, or parts	59
Maintain repair records	65
Maintain welding machines or equipment	70
Move or fit heavy objects	8
Operate hoist, winch, or hydraulic boom	34
Operate pneumatic test equipment	82
Operate vehicle engine electrical system test equipment	84
Overhaul vehicle major operating units, such as engines or transmissions	84
Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read schematics	34
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Repair or replace malfunctioning or worn mechanical components	62
Service vehicle with water, fuel, or oil	73
Set up and operate variety of machine tools	62
Solder vehicle components	92
Test mechanical products or equipment	56
Test operate vehicles before or after repair	85
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use combination welding procedures	68
Use electrical or electronic test devices or equipment	40
Use electronic calibration devices	68
Use engine diagnostic equipment	82
Use hand or power tools	2
Use knowledge of metric system	39
Use knowledge of welding filler rod types	75
Use machine tools in installation, maintenance, or repair	72
Use precision measuring devices in mechanical repair work	61
Use soldering equipment	44
Use vehicle repair tools or safety equipment	80
Use voltmeter, ammeter, or ohmmeter	52
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

**Similarity of Focus
Occupation to Associated
Occupation: 93**

Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031)
Associated Occupation: Mobile Heavy Equipment Mechanics, Except Engines (49-3042)

Tools and Technologies	Exclusivity
Batteries and cells and accessories	43
Computer data input devices	2
Computers	1
Cutting and crimping and punching tools	3
Data management and query software	1
Electrical measuring and testing equipment	7
Face and head protection	7
Fastener setting tools	12
Forming tools	2
Hearing protectors	12
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Measuring and layout tools	3
Mechanical instruments	14
Paint applicators and painting accessories	15
Personal communication devices	2
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Prying and bending tools	10
Rough and finishing tools	5
Safety apparel	4
Sealing tools	21
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Transportation related equipment and instruments	29
Vehicle servicing equipment	43
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.